Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of 1998 Biennial Regulatory Review -- Amendment of Part 18 of the Commission's Rules to Update Regulations for RF Lighting Devices	)	ET Docket No. 98-42

COMMENTS OF THE NATIONAL ASSOCIATION OF BROACASTERS

The Commission has long had a two-tiered system for regulating the emissions from low power, non-licensed radio frequency devices. Under this system, devices marketed for use in residential environments are subject to somewhat more strict radio frequency emission limits than are devices marketed for use in non-residential environments. The Commission now is re-addressing this and other issues in its *Notice of Proposed Rule Making*[1] in the above-captioned proceeding. Here the National Association of Broadcasters ("NAB")[2] addresses those issues, below, and also points out that the matters addressed in this proceeding are but a part of a larger set of issues now being reviewed by this Commission in a newly-initiated proceeding.

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[1] *Notice of Proposed Rule Making* in ET Docket No. 98-42, FCC 98-53, released April 9, 1998.

[2] NAB is a nonprofit, incorporated association of television and radio stations and broadcast networks which serves and represents the American broadcast industry.

There are two significant problems with the existing two-tiered approach. The first is that it is impossible for the Commission to ensure that devices designed to comply with the non-residential limits do not end up in use in residential environments. The second is that the two-tiered system assumes that radios and televisions in non-residential environments are located farther away from RF light bulbs, computers, and other low power, non-licensed radio frequency devices than radios and televisions used in residential environments.[3]

In reality, radio and television receivers in use in non-residential environments are typically as close – if not closer – to low power, non-licensed radio frequency devices as those in use in residential environments. RF light bulbs, computers, and other Part 15 and Part 18 devices are often very near broadcast receivers in non-residential environments. Furthermore, there are typically *more* Part 15 and Part 18 devices in close proximity to broadcast receivers in non-residential environments than in residential environments. For example, a typical home may have one or two computers in it – but a typical office may have computers at every workstation, and the workstations may be only ten feet apart. NAB believes that it is unwise for the Commission to relax its Part 18 conducted emission limits for environments where receivers will be bombarded with interference from multiple Part 18 and Part 15 devices.

Users of broadcast receivers in non-residential environments deserve as much protection from radio frequency interference as users in residential environments. According to the Radio Advertising Bureau's *Radio Marketing Guide & Fact Book*, 21% of all radio listening occurs somewhere other than at home or inside a vehicle.[4] Because 96% of all

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[3] "Consumer ISM equipment is typically used in close proximity to TV and other radio receivers and therefore is subject to more restrictive emissions limits." (*Notice* at ¶ 2.)

[4] *Radio Marketing Guide & Fact Book*, Radio Advertising Bureau, p.9 (1998).

consumers listen to the radio every week,[5] this means that 20% of all consumers – over 50 million Americans – listen to the radio outside their homes or vehicles. It is just as important for these people to receive timely and interference-free news, weather and traffic reports from free over-the-air broadcasters as it is for those people who listen to the radio in their homes or in their vehicles. Accurate weather and traffic information provided to commuters before they leave the office can save time, money and lives when travel plans are adjusted to take the broadcast information into account. Timely receipt of important information while at the office has many beneficial effects. It is clearly in the public's best interest for the Commission to provide equal protection from RF interference to broadcast receivers in *all* locations.

NAB strongly opposes the Commission's proposal to increase the conducted emission limits for non-consumer RF lighting devices to 3,000 μV in the 450-1600 kHz portion of the AM broadcast band, and to 10,000 μV in the 1600-1705 kHz portion of the AM broadcast band. These proposed new limits would cause tremendous harm to both the AM broadcasting service and to the American public that relies on this service. Instead, we believe the Commission should eliminate the distinction between consumer and non-consumer devices for *all* Part 18 equipment, and that the existing standards for consumer equipment should be applied to *all* Part 18 equipment.

To illustrate how unreasonable the proposed limits would be one only need look at the fact that the limits would assume that a typical home has *144 times* the number of RF lighting devices emitting energy onto the AC power lines than does a typical commercial or industrial

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[5] *Id.* at 2.

building.[6] It seems intuitively obvious to us that a typical commercial building is kept brighter, and has more lighting fixtures per square foot of floor space, than a typical residence. This would suggest that the emission limits for RF lighting devices in non-residential environments should be *reduced* to levels *below* the existing limits for residential environments – not increased as the Commission has proposed. If it were assumed that there were only twice as many RF lighting devices in a typical non-residential environment as there are in a typical residential environment, then a more appropriate conducted emission limit for the non-residential environment would be about 175 μV.

In ET Docket No. 98-80[7] the Commission recently has initiated a broad inquiry into the appropriateness of its conducted emission limits for *all* Part 18 *and* Part 15 devices. NAB and many other parties are preparing material for submission into the record of this docket that will address, in greater detail, the impact of conducted emissions on broadcast receivers. That is, this proceeding in ET Docket No. 98-80 is addressing, in a global way, the issues that are germane not only to the matters embodied in the instant proceeding but to a wide range of interference situations.

As such, we urge the Commission to postpone any decision in the instant proceeding at least until the record in ET Docket No. 98-80 is complete and the FCC has decided how to resolve these issues generally. By pursuing this more reasoned and comprehensive course of action, the Commission will be able to incorporate any conclusions derived from the ET

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[6] This is apparent when one applies the root-sum-square method for calculating the total signal energy from multiple signals. The non-residential conducted emission limit is equal to the square root of the quantity 144 times the square of the residential limit (*i.e.*, $3{,}000\ \mu V = \sqrt{144(250\ \mu V)^2}$).

[7] *Notice of Proposed Rule Making* in ET Docket No. 98-80, FCC 98-102, released June 8, 1998.

Docket No. 98-80 proceeding into the agency's ultimate decision in this "RF lighting device" proceeding.

Respectfully submitted,

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